

ATTORNEY DOCKET NO. UCDA.004.01US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re application of: Mikal E. Saltveit *et al*

Serial No.: 09/964,992

Filed: September 26, 2001

For: Characterization of Phenylalanine Ammonia-
lyase (PAL) Gene in Wounded Lettuce
Tissue

) Examiner:

) Art Unit: 1645

) INFORMATION DISCLOSURE
) STATEMENT

BOX DD

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

This Information Disclosure Statement is hereby submitted in accordance with 37 CFR 1.98 and 37 CFR 1.98(a)(2)(iii) requiring submission of copies of cited pending U.S. patent applications, and pursuant to Applicant's continuing duty under 37 CFR 1.56 to bring any information which may be material to patentability of this application to the Examiner's attention.

Copies of missing references A2, A3, C1, and D8-D40 will be submitted under separate cover upon our receipt. Copies of references A1, C2 and D1-D7 are attached hereto.

Enclosed, find also a copy of reference B1 which is being submitted in accordance with the new rule change pertaining to citation of pending U.S. patent applications.

CERTIFICATE OF EXPRESS MAILING

"Express Mail" Label No.: EL 923476574 45

Date of Deposit: Feb 8 2002

I hereby certify under 37 C.F.R. 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" with sufficient postage on the date indicated above and is addressed to the U.S. Patent and Trademark Office, P.O. Box 2327 Arlington, VA 22202

(Signature) Robert Pattison

(Printed Name) Robert Pattison

PATENT

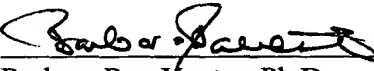
ATTORNEY DOCKET NO. UCDA.004.01US

Applicant makes no representation that a complete search has been conducted by the Applicant, or that there is not possibly more relevant art. Applicant also makes no representation that the information submitted herewith is in fact material.

The subject application is believed patentable over any of the above references.

Respectfully submitted,

Dated:  February 6, 2002


Barbara Rae-Venter, Ph.D.
Reg. No. 32,750

RAE-VENTER LAW GROUP, P.C.
P.O. Box 60039
Palo Alto, CA 94306-0039
Telephone (650) 328-4400
Facsimile (650) 328-4477

BRV/cs



DOCKET NO. UCDA.004.01US

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 1 of 4In re the application of: Mikal E. Saltveit, *et al.*

Art Unit:

Serial No.

Examiner:

Filed: September 26, 2001

U.S. PATENT DOCUMENTS

| Ref. | Examiner's | Document | Class/ | Filing | | |
|--------|------------|-----------|---------|----------------|----------|----------|
| Desig. | Initials | Number | Date | Name | Subclass | Date |
| A1 | | 6,113,958 | 9/5/00 | Saltveit, M | | 10/29/98 |
| A2 | | 5,378,619 | 1/3/95 | Rogers, S | | 12/22/93 |
| A3 | | 5,693,507 | 12/2/97 | Daniell, et al | | 7/20/94 |

PENDING U.S. PATENT DOCUMENTS

| Ref. | Examiner's | Document Number | Name | Filing Date |
|--------|------------|-----------------|-------------|-------------|
| Desig. | Initials | | | |
| B1 | | 60/235,956 | Saltveit, M | 9/26/00 |

FOREIGN PATENT DOCUMENTS

| Ref. | Examiner's | Document | Class/ | Filing Date | | |
|--------|------------|---------------|---------|-------------|----------|---------|
| Desig. | Initials | Number | Date | Country | Subclass | |
| C1 | | WO 97/10328 | 3/20/97 | PCT | | 7/12/95 |
| C2 | | EPA 0 120 515 | 10/3/84 | Europe | | 2/21/84 |

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

| Ref. | Examiner's |
|--------|------------|
| Desig. | Initials |

Examiner:

Date Considered:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

PATENT

DOCKET NO. UCDA.004.01US



COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 2 of 4

In re the application of: Mikal E. Saltveit, *et al.*] Art Unit:
Serial No.] Examiner:
Filed: September 26, 2001]

- D1 Tomas-Barberan, F. et al, Early Wound- and Ethylene-induced Changes in Phenylpropanoid Metabolism in Harvested Lettuce, 1997, pp. 399-404, J. Amer. Soc. Hort. Sci. 122(3).
- D2 Ke, D. et al., Effects of Calcium and Auxin on Russet Spotting and Phenylalanine Ammonialyase Activity in Lettuce, Oct. 1986, pp. 1169-1171, HortScience. Vol. 21(5).
- D3 Loaiza-Velarde, J. et al, Effect of Intensity and Duration of Heat-shock Treatments on Wound-induced Phenolic Metabolism in Iceberg Lettuce, Oct. 30, 1997, pp. 873-877, J. Amer. Soc. Hort. Sci. 122(6).
- D4 Ritenour, M. et al, Identification of a phenylalanine ammonia-lyase inactivating factor in harvested head lettuce (*Lactuca sativa*), Jan. 25, 1996, pp. 327-331, Physiologia Plantarum 97.
- D5 Lopez-Galvez, G. et al, Wound-induced phenylalanine ammonia lyase activity: factors affecting its induction and correlation with the quality of minimally processed lettuces, May 18, 1996, pp. 223-233, Postharvest Biology and Technology 9.
- D6 Ke, D. et al., "Developmental Control of Russet Spotting, Phenolic Enzymes, and IAA Oxidase in Cultivars of Iceberg Lettuce", 1989, pp. 472-477, J. Amer. Soc. Hort. Sci., 114(3).
- D7 Peiser, G. et al., "Phenylalanine ammonia lyase inhibitors control browning of cut lettuce", Postharvest Biology and Technology 14, pp. 171-177, Oct. 1998.
- D8 Brecht, J., Physiology of Lightly Processed Fruits and Vegetables, Feb. 1995, pp. 18-22, HortScience, vol. 30(1).
- D9 Bolin, H.R., et al, Effect of Preparation Procedures and StorageParameters on Quality Retention of Salad-cut Lettuce, 1991, Journal of Food Science, vol. 56, No. 1.

Examiner:

Date Considered:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



PATENT

DOCKET NO. UCDA.004.01US

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 3 of 4

In re the application of: Mikal E. Saltveit, *et al.*] Art Unit:
Serial No.] Examiner:
Filed: September 26, 2001]

- D10 Couture, R. et al, Physiological Attributes Related to Quality Attributes and Storage Life of Minimally Processed Lettuce, Jul. 1993, pp. 723-725, HortScience vol. 28(7).
- D11 Hoagland, R., O-Benzylhydroxylamine: An Inhibitor of Phenylpropanoid Metabolism in Plants, Aug. 6, 1985, pp. 1353-1359, Plant Cell Physiol. 26(7).
- D12 Ke, D. et al, Plant Hormone Interaction and Phenolic Metabolism in the Regulation of Russet Spotting in Iceberg Lettuce, Jul. 5, 1988, pp. 1136-1140, Plant Physiol. 88.
- D13 Ke, D. et al, Regulation of Russet Spotting, Phenolic Metabolism, and IAA Oxidase by Low Oxygen in Iceberg Lettuce, 1989, pp. 638-642, J. Amer. Soc. Hort. Sci. 114(4).
- D14 Ke, D. et al., Wound-Induced Ethylene Production, Phenolic Metabolism and Susceptibility to Russet Spotting in Iceberg Lettuce, Physiologia Plantarum 76, pp. 412-418, Copenhagen 1989.
- D15 Leubner-Metzger, G. et al, Phenylalanine Analogues: Potent Inhibitors of Phenylalanine Ammonia-Lyase are Weak Inhibitors of Phenylalanine-tRNA Synthetases, 1994, pp. 781-790, Verlag der Zeitschrift fur Naturforschung.
- D16 McEvily, A., Inhibition of Enzymatic Browning in Foods and Beverages, 1992, pp. 253-273, Critical Reviews in Food Science and Nutrition, 32(3).
- D17 Saltveit, M. Physical and Physiological Changes in Minimally Processed Fruits and Vegetables, 1997, pp. 204-220, Phytochemistry Fruit and Vegetables.
- D18 Siripanich, J. et al., Effects of CO₂ on Total Phenolics, Phenylalanine Ammonia Lyase, and Polyphenol Oxidase in Lettuce Tissue, 1985, pp. 249-253, J. Amer. Soc. Hort. Sci. 110(2)
- D19 Thomas, R. et al., Changes in Soluble and Bound Peroxidase-IAA Oxidase During Tomato Fruit Development, 1981, pp. 158-161, Journal of Food Science vol. 47.
- D20 Zon, J. et al., Inhibitor of Phenylalanine Ammonia-Lyase: 2-Aminoindan-2-phosphonic Acid and Related Compounds, 1992, pp. 625-628, Ann. Chem. VCH Verlagsgesellschaft MbH, D-6940 Weinheim.

Examiner:

Date Considered:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

PATENT

DOCKET NO. UCDA.004.01US



COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 4 of 4

In re the application of: Mikal E. Saltveit, *et al.*] Art Unit:
Serial No.] Examiner:
Filed: September 26, 2001]

| | |
|-----|---|
| D21 | Coulson, <i>Trends in Biotechnology</i> , 12:76-80 (1994). |
| D22 | Birren, <i>et al.</i> , <i>Genome Analysis</i> , 1:543-559 (1997). |
| D23 | Odell, <i>et al.</i> (1985) <i>Nature</i> 313:810-812 |
| D24 | Von Heijne <i>et al.</i> (1991) <i>Plant Mol. Biol. Rep.</i> 2:104-126 |
| D25 | Clark <i>et al.</i> (1989) <i>J. Biol. Chem.</i> 264:17544-17550 |
| D26 | della-Cioppa <i>et al.</i> (1987) <i>Plant Physiol.</i> 84:965-968 |
| D27 | Romer <i>et al.</i> (1993) <i>Biochem. Biophys. Res Commun.</i> 196:1414-1421 |
| D28 | Shah <i>et al.</i> (1986) <i>Science</i> 233:478-481 |
| D29 | Chrispeels, K., (1991) <i>Ann. Rev. Plant Phys. Plant Mol. Biol.</i> 42:21-53 |
| D30 | Raikhel, N. (1992) <i>Plant Phys.</i> 100:1627-1632 |
| D31 | Smith, <i>et al.</i> (1988) <i>Nature</i> 334:724-726 |
| D32 | Napoli, <i>et al.</i> (1989) <i>Plant Cell</i> 2:279-289 |
| D33 | Waterhouse, <i>et al.</i> (1998) <i>Proc. Natl. Acad. Sci. USA</i> 95:13959-13964 |
| D34 | Svab, <i>et al.</i> (1990) <i>Proc. Natl. Acad. Sci. USA</i> 87:8526-8530 |
| D35 | Svab and Maliga (1993) <i>Proc. Natl. Acad. Sci. USA</i> 90:913-917 |
| D36 | Doolittle, R.F., <i>OF URFS and ORFS</i> (University Science Books, CA, 1986. |
| D37 | Ditta, <i>et al.</i> , (<i>Proc. Nat. Acad. Sci., U.S.A.</i> (1980) 77:7347-7351 |
| D38 | McBride and Summerfelt (<i>Plant Mol. Biol.</i> (1990) 14:269-276 |
| D39 | Jouanin, <i>et al.</i> , <i>Mol. Gen. Genet.</i> (1985) 201:370-374 |
| D40 | Frohman <i>et al.</i> (1988) <i>Proc. Natl. Acad. Sci. USA</i> 85:8998-9002 |

Examiner:

Date Considered:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.